

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions,  
and listings of claims in the application:

LISTING OF CLAIMS:

1-13. (cancelled).

14. (currently amended) A non-transitory tangible computer readable recording medium storing a program of instructions executable by a computer to control the computer to function as an electronic editor for a calculation formula for calculating the price of a service, the electronic editor creating said calculation formula in a format directly readable by an electronic costing system, the electronic costing system establishing, with the aid of said calculation formula, the price of a service using information on the service consumed contained in consumption variables, said computer being controlled to function as the electronic editor by performing the steps of:

- the computer accepting nodes selected via an  
~~interface of the computer, a user selecting nodes~~ from a node library of pre-stored nodes stored in the computer, each node ~~being associated with~~ causing execution of a calculating operation ~~executable~~ by the electronic costing system to establish the price of the service;

- the computer creating a tree structure by accepting arcs via an interface of the computer, the user connecting the selected nodes to one another by arcs, the arcs defining, by an ordered relationship, an order in which said calculating operations are carried out by the electronic costing system, the nodes connected to each other by the arcs creating a tree structure defining said formula, said tree structure being formed by i) nodes including a root node, father nodes, and child nodes and ii) ~~endings~~ ending nodes, each ending node extending from a respective one of the child nodes, said tree structure defining an order in which said calculating operations are carried out by the electronic costing system;

- the computer displaying on a screen, in a graphic form, said tree structure;

- the computer automatically converting the created tree structure, displayed in a graphic form, into a format directly readable by the electronic costing system; and

the computer storing the converted tree structure in an information storing means, said information storing means being a [Michel Col]non-transitory tangible computer-readable medium, wherein,

the root node forms a root of the tree structure,  
each father node is connected to at least one child node by one of the arcs,

each child node is connected from one of the father nodes by one of the arcs,

each ending node forms an end of a branch of the tree structure,

each of the father nodes and the child nodes being associated with a corresponding one of said calculating operations designed to be executed by the costing system to establish the price of the service, the calculation operations being executed based on the order defined by the arcs,

each of the ending nodes being associated with a corresponding operation for i) calculating a price and with ii) stopping the costing system from passing further through the tree structure

~~the information storing means and the computer are each hardware devices.~~

15. (cancelled).

16. (currently amended) A recording medium according to claim 14, wherein said program of instructions controls the computer to further function as the electronic editor by performing the further steps of: [[,]]

~~— via an interface of the computer, the user selecting,~~  
accepting a selection of a first-level father node from the node library of pre-stored nodes and forming the first-level

~~father node in response to a selection from the node library of pre-stored nodes, [[a]]~~ the first-level father node being solely associated with an operation for activating child nodes of said first-level father node in response to receiving a new value for one of the consumption variables processed by a calculation operation associated with one of the child nodes, wherein the corresponding first-level father node activates the corresponding child nodes in response to receiving the new value for one of the consumption variables processed by the calculation operation associated with one of the corresponding child nodes, and  
~~via an interface of the computer, the user~~  
forming a connection order between said computer-formed first-level father node and said corresponding child nodes by accepting arcs connecting the selected-computer-formed first-level father node to the child nodes of said computer-formed first-level father node, the [[by]] arcs defining, by an ordered relationship, an order in which said calculating operations are carried out by the electronic costing system.

17. (currently amended) A recording medium according to claim 14, wherein said program of instructions controls the computer to further function as the electronic editor by performing the further steps of:

~~via an interface of the computer, the user selecting,~~

accepting a selection of a first-level father node from the node library of pre-stored nodes [[,]] and forming a the first-level father node in response, the first-level father node being solely associated with an operation for activating child nodes of the first-level father node and the calculation operation associated therewith, at predetermined time intervals, the corresponding first-level father node activating the corresponding child nodes at predetermined time intervals for the operation associated with the corresponding child nodes, and  
~~— via an interface of the computer, the user~~  
forming connections connecting the selected first-level father node to forming a connection order between said computer-formed first-level father node and —the child nodes of said first-level father node by accepting arcs connecting the computer formed first-level father node to the child nodes of said computer formed first-level father node, the arcs defining, by an ordered relationship, an order in which said calculating operations are carried out by the electronic costing system.

18. (currently amended) A recording medium according to claim 14, wherein said program of instructions controls the computer to further function as the electronic editor by performing the further steps of: [[,]]

~~— via an interface of the computer, the user selecting,~~

accepting a selection of a processing child node from the node library of pre-stored nodes [[,]] and forming a the processing child node in response, the processing child node being solely associated with a calculating operation for calculating a new value from the values of the consumption variables and pre-existing calculated variables and for allocating the calculated new value to one of i) a consumption variable, ii) a pre-existing variable, and a new calculated variable, and

~~— via the interface of the computer, the user~~

forming a connection orders connecting the between said computer-formed selected processing child node to and at least one node of said tree structure by accepting arcs connecting the computer-formed processing child node to a node of the tree structure, the arcs defining, by an ordered relationship, an order in which said calculating operation is carried out by the electronic costing system.

19. (currently amended) A recording medium according to claim 14, wherein said program of instructions controls the computer to further function as the electronic editor by performing the further steps of: [[,]]

~~— via the interface of the computer, the user~~

~~selecting,~~

accepting a selection of a decision node from the node library of pre-stored nodes and forming a~~the~~ decision node in response~~corresponding to a decision node selected from the node library of pre-stored nodes~~, ~~[[a]]~~ the decision node being solely associated with a conditional activation operation of all of corresponding child nodes and the calculating operation associated therewith, using the value of a consumption variable or a calculated variable, and

~~via the interface of the computer, the user~~  
forming a connection orders ~~connecting the~~ between said computer-formed selected decision node to~~and~~ the child nodes of said computer-formed decision node by accepting arcs connecting the computer-formed decision node to the child nodes of said computer-formed decision node, the arcs defining, by an ordered relationship, an a connection an order in which said calculating operations are carried out by the electronic costing system.

20. (currently amended) A recording medium according to claim 14, wherein said program of instructions controls the computer to further function as the electronic editor by performing the further steps of:

~~via the interface of the computer, the user~~  
~~selecting,~~  
forming accepting a selection of a split node  
~~corresponding to a split node selected~~ from the node library of

pre-stored nodes, and forming the split node in response, [[a]]  
the split node being solely associated with an operation for  
extracting from the value of a consumption variable or a  
calculated variable, a range of values either between a lower  
limit and an upper limit, or outside the lower and upper limits,  
the child nodes processing the range of values extracted, and  
~~via the interface of the computer, the user~~  
forming a connection orders connecting between the  
computer-formed selected split node to the child nodes of said  
computer-formed split node by accepting arcs connecting the  
computer-formed split node to the child nodes of said computer-  
formed split node, the arcs defining, by an ordered relationship,  
~~an a connection an~~ order in which said calculating operations are  
carried out by the electronic costing system.

21. (currently amended) A recording medium according to  
claim 14, wherein said program of instructions controls the  
computer to further function as the electronic editor by  
performing the further steps of: [[,]]

~~via the interface of the computer, the user selecting,~~  
accepting a selection of a converter forming a node  
~~corresponding to a node selected from the node library of pre-~~  
stored nodes and forming the converter in response, [[a]] the  
converter being a formed node solely associated with [[an]] a



calculating operation for unit conversion of a calculated value,  
and

~~via the interface of the computer, the user~~  
forming a connection orders connecting the between the  
computer-formed selected node converter to and a node of the tree  
structure by accepting an arc connecting the computer-formed  
converter to the node of the tree structure, the arc defining, by  
an a connection an ordered relationship, an order in which said  
calculating operation is carried out by the electronic costing  
system.

22. (currently amended) A recording medium according to  
claim 14, wherein said program of instructions controls the  
computer to further function as the electronic editor by  
performing the further steps of:

~~via the interface of the computer, the user~~  
~~selecting,~~  
forming accepting a selection of an ending node  
corresponding to a node selected from the node library of pre-  
stored nodes and forming the ending node in response, [[an]] the  
ending node being solely associated with a calculation operation  
for calculating a price and with an operation for stopping the  
costing system from passing through the tree structure, and

~~via the interface of the computer, the user~~

~~forming a connection orders connecting the~~ between said computer-formed ~~selected ending node to~~ and a node of the tree structure by accepting an arc connecting the computer-formed ending node to the node of the tree structure, the arc defining, by an ordered relationship, an order in which said calculating operation is carried out by the electronic costing system.

23. (currently amended) A recording medium according to claim 14, wherein said program of instructions controls the computer to further function as the electronic editor by performing the further steps of:

~~via the interface of the computer, the user selecting,~~

accepting with a selection of a parameterisable node from the node library of pre-stored nodes, and forming the parameterisable node in response, the parameterisable a node associated being associated with a pre-defined parameterisable calculating operation,

~~via the interface of the computer, the user~~  
forming a connection orders connecting the between the computer-formed parameterisable selected node to and a father node by accepting an arc connecting the computer-formed parameterisable node to the father nodes of said computer-formed parameterisable node, the arcs defining, by an ordered

relationship, an order in which said calculating operation is carried out by the electronic costing system, and

~~via the interface of the computer, the user~~  
parametering the parameterisable operation associated with the ~~selected~~computer-formed parameterisable node by accepting parameters.

24. (currently amended) An electronic costing system for automatically establishing the price of a service using a calculation formula, comprising:

a receiver storing consumption variables containing information on consumption of the service, the receiver being a hardware device;

a storage element containing a tree structure defining a calculation formula for automatically establishing the price of the service, the calculation formula for calculating the price of the service using the information on consumption of the service stored by the receiver, storage element being a hardware device,

said tree structure being formed by i) nodes including a root node, father nodes, and child nodes and ii) ~~ending~~ ending nodes, each ending node extending from a respective one of the child nodes, the father, child, and ending nodes connected to one another by arcs, each node being associated with a pricing calculating operation executable by the electronic costing system to establish the price of the service, the arcs defining, by an

ordered relationship, an order in which said operations are carried out by the electronic costing system, wherein,

the root node forms a root of the tree structure,

each father node is connected to at least one child node by one of the arcs,

each child node is connected from one of the father nodes by one of the arcs,

each ending node forms an end of a branch of the tree structure,

each of the father nodes and the child nodes being associated with a corresponding one of the calculating operations designed to be executed by the costing system to establish the price of the service, the calculation operations being executed based on the order defined by the arcs,

each of the ending nodes being associated with a corresponding operation for i) calculating a price and with ii) stopping the costing system from passing further through the tree structure; and

an electronic calculating unit, the electronic calculating unit being a hardware device configured for  
i) receiving information of the consumption variables from the receiver and receiving the tree structure from the storage unit, and ii) executing operations associated with the father and child nodes and the ~~endings~~ ending nodes of the tree structure, in

response to the consumption variables information received from the receiver, so as to pass through the tree structure of the calculation formula from the root node to at least one of the ~~endings~~ ending nodes by successively executing conditional activation operations of the father nodes, then, solely conditional activation operations associated with activated child nodes until at least one ending node associated with a price-calculating operation has been activated, and to execute the at least one ending node to automatically establish the price of the service,

~~wherein the receiver, the storage element and the electronic calculating unit are each hardware devices.~~

25. (currently amended) A method of creating a formula for calculating, on a ~~computer~~ computerized electronic calculating unit, the price of a service in a directly readable format by an electronic costing system, the electronic costing system, with the aid of said formula, establishing the price of a service from information on consumption of the service, said information contained in consumption variables, said method comprising of steps of:

~~via an interface with an electronic calculator, a user selecting nodes from a node library of pre-stored nodes stored in a storing means connected to the electronic calculator, each node~~

~~being associated with a calculating operation executable by the electronic costing system to establish the price of the service~~  
~~via the interface with the electronic calculator, the user~~

creating a tree-structure by i) accepting selected nodes from a node library of pre-stored nodes stored in a storing means connected to the electronic calculator, each node being associated with a calculating operation executable by the electronic costing system to establish the price of the service,  
and ii) accepting arcs connecting the selected nodes to one another ~~by arcs~~, the arcs defining, by an ordered relationship, an order in which said calculating operations are carried out by the electronic costing system, the nodes connected to each other by the arcs creating a tree structure defining said formula;

displaying, on a screen in a graphic form, the created tree structure during creation or when already created; and  
~~the electronic calculator~~

converting said created tree structure displayed in a graphic form into a format directly readable by the electronic costing system and storing the converted tree structure;

wherein the electronic calculator and the storing means are each hardware devices.

26. (previously presented) Method according to claim 25, wherein, at least one pre-stored parameterisable node is

associated with a pre-defined parameterisable calculating operation,

the selection of nodes includes a sub-step of the user selecting, from the node library of pre-stored nodes, the at least one parameterisable node associated with a pre-defined parameterisable calculating operation,

the connecting of nodes includes a sub-step of the user connecting the selected parameterisable node to a node of the tree structure, and

via the interface with the electronic calculator, the user parametering the parameterisable calculating operation of the selected parameterisable node.

27. (currently amended) A recording medium according to claim 14, wherein,

said computer associates conditional activation operations with said father nodes, said conditional activation operations  
operations-the formulae for calculating the price of the service  
includes conditional calculating rules having a form of:

if Condition 1 exists, then Action 1 takes place, where  
i) Condition 1 is a logical function of which the result is True or False, and ii) Action 1 is a mathematical function of the calculation of the price associated with a corresponding child node.